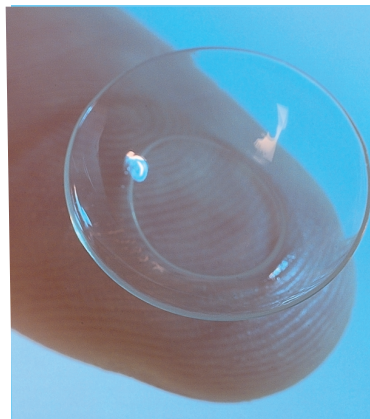


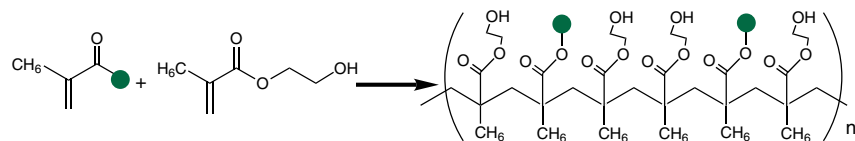
New Biocompatible Contact Lens Materials Developed

LBNL/Sunsoft CRADA Yields New Materials in Clinical Trials



LBNL/Sunsoft Corporation team has developed two new contact lens materials for increased biocompatibility. One is now being prepared for clinical trials.

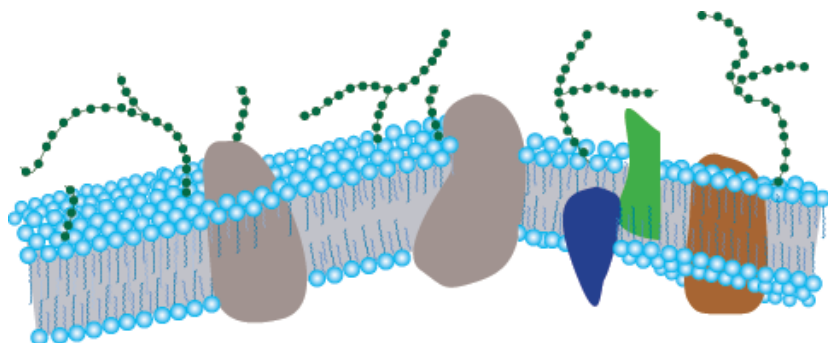
Carbohydrate hydrogels mimic cell surfaces and bind water but not protein.



Carbohydrate

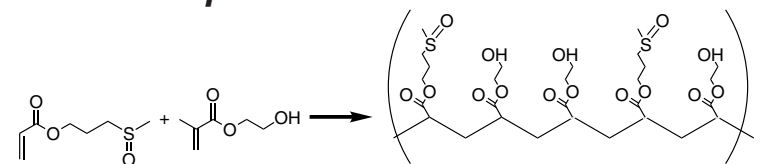
HEMA

Biomimetic copolymer



Normal cell surfaces display carbohydrates (green) on their surfaces.

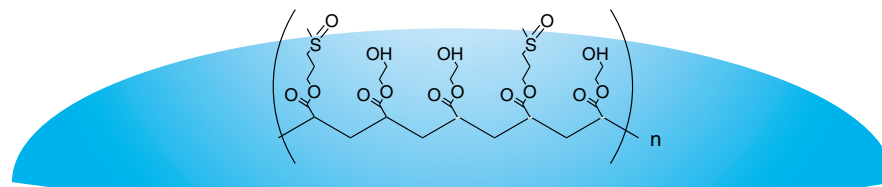
Sulfoxide groups expressed at lens surface confer high water content and retention and low protein adsorption.



Sulfoxide

HEMA

HEMA/sulfoxide copolymer



CAROLYN BERTOZZI
BIOMOLECULAR MATERIALS PROGRAM
MATERIALS SCIENCES DIVISION
BERKELEY LAB